

November 7, 2013

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

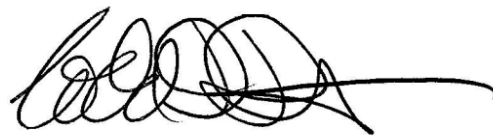
Re: Regarding Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions; Docket No. 12-268 and Public Notice, September 23, 2013, DA 13-1954

Dear Ms. Dortch:

On November 5, 2013, Jules Howard-Wright and Mike Hughes, both Principal Consultants and Co-Founders of Transmit Consultancy Ltd. ("Transmit"), Megan Delany, Dentons US LLP, and I met with Matthew Berry, Chief of Staff for FCC Commissioner Ajit Pai, to discuss the points set forth in the attached presentation and the comments that Transmit filed in the above-referenced proceeding. Ms. Howard-Wright and Mr. Hughes also discussed their experience with spectrum repacks in other jurisdictions, and how this experience could benefit the proposed repack in the United States.

Pursuant to Section 1.1206(b) of the Commission's rules, a copy of this letter and the attached presentation are being filed *via* ECFS for inclusion in the public record for the above-referenced proceeding. Please contact the undersigned if you have any questions or need additional information.

Respectfully submitted,



Todd D. Daubert
Counsel for Transmit Consultancy Ltd.

cc: Matthew Berry

Introduction

Transmit Consultancy ("Transmit") is a team of broadcast TV experts, including business and technical expertise, headquartered in London and San Francisco, California. Transmit specializes in spectrum repacking projects, and has consulted in broadcast repacking projects across Europe, including projects like the FCC's upcoming incentive auctions.

Transmit's experience with repacking exercises in the UK and in other European countries can inform the approach in the upcoming repack to accommodate 700 MHz wireless broadband auction winners. Based on this experience, Transmit believes that centrally managed – but consensus based – coordination is essential in light of the complex goals, and applicable limitations, of the incentive auctions. Specifically, a single-purpose organization operating within a framework established by the regulator would facilitate consolidated, central management for repacking that is coordinated by the Industry itself. The benefits of Industry coordination in this type of framework include:

- Maximizing the benefit to the public by meeting the spectrum goals in a timely manner;
- Minimizing any disruptive impact on the TV-viewing public and harm to broadcasters;
- Reducing relocation costs through efficient management; and
- Avoiding waste, fraud, and abuse.

The public interest will best be served by enabling broadcasters to minimize the impacts of disruptive events on their businesses and to participate in the repacking process in a commercially sophisticated manner.

The challenges and opportunities of the US spectrum repack

1. To release spectrum to the successful bidders/mobile carriers in a transparent and planned manner that minimizes the time it takes the new service licensees to launch new services to market, and the Government to collect auction revenues.
2. To provide an environment in which broadcasters have confidence to work together to implement the repack and to explore the opportunities for sharing spectrum, creating a positive precedent for future spectrum efficiency.
3. To communicate effectively with American viewers so that they will understand the benefits of repacking and the steps must take to continue viewing their favorite programming.
4. To enable broadcasters to efficiently reengineer their networks in a robust and "like for like" manner with comparable coverage.
5. To minimize costly transition time while ensuring that broadcasters can remain on-air when complex national and international spectrum-use inter-dependencies are at play.
6. To ensure that the engineering and equipment supply-chain (with scarce resources) can successfully meet the needs of and deliver the repack nationally within the three-year transition period.

7. To ensure that the \$1.75 billion TV Broadcaster Relocation Fund to reimburse broadcasters for “reasonable costs” is sufficient, and that it is subject to appropriate accounting safeguards.

Guiding principles to respond to the challenges and opportunities of the repack

1. **Industry collaboration and coordination must be built on a consensus basis.**

Broadcaster collaboration and coordination can be valuable in developing innovative ways to save program costs, optimize the use of scarce resources and deliver pragmatic solutions. A mechanism designed to facilitate, at an industry level, broadcaster collaboration and coordination to deliver a repack can greatly increase the chances of program success but ideally it should emerge from the broadcaster players themselves. While such a mechanism for fostering industry collaboration and coordination requires unequivocal Government and regulator support and industry engagement can be formalized in licenses, the guidance for the structure of such a mechanism cannot be too prescriptive. For example, one such mechanism might be the establishment of a single-purpose delivery organization with just the “framework” set by Government and/or the regulator. For an industry to begin to collaborate and coordinate itself, it must be enabled to design itself how it does this. It is critical that the broadcast industry be given every opportunity to minimize the impacts of what is essentially a disruptive event on their businesses and that broadcasters are enabled to approach delivering a project with a public purpose in a business minded and commercially astute manner.

2. **A phased and coordinated spectrum planning and broadcast reengineering approach can greatly facilitate broadcast transmission continuity and protect station coverage through the transition.**

A phased and coordinated planning approach increases confidence in the relocation process, projected costs, and the program, generally. The complexity and limitations of the second US repack also means that a phased approach might be the only way to endeavor to meet the 3 year transition period given that spectrum and resources are scarce, and spectrum interdependencies complex. Planning enables engineering and spectrum management based tools to be used to ensure seamless on-air transition with consistent coverage during the transition. Planning also minimizes the time broadcasters spend in expensive transitional states, and proactively manage and mitigate any impacts to a station’s coverage after the transition. Central planning significantly decreases resources, cost and elapsed time required across the whole project.

3. **A phased broadcast reengineering approach can expedite the launch of new mobile services in critical markets.**

A phased and nationally planned approach can effectively enable the TV industry, some broadcasters and some difficult areas (*e.g.*, areas along the borders of Canada and Mexico) more time while repacking in priority areas is expedited. Multiple geographical areas can be run in parallel when engineering and interference inter-dependencies allow.

4. **A realistic and iterative approach to engineering planning is critical to successful implementation of a repack program.**

Reengineering broadcast TV networks is a multi-dimensional puzzle with complex interdependencies. Technical decisions made by one broadcaster can impact multiple other decision points and broadcasters. As a result unified high-level, over-arching spectrum and engineering design/planning needs to be iterative with continuous feedback loops to ensure the most robust broadcast solutions are reached and the rollout timetable is optimized. It is critical for the success of the reengineering program that limitations are accepted and factored into the

planning process (*i.e.*, bad weather, difficult geographical terrain, limited technical resources) building in upfront contingency.

5. A clear, attainable, and secure public timetable is critical so that the viewing public can have confidence in what they need to do and when.

A centrally managed, large-scale phased program with multiple dependencies should only announce dates to the public when work is sufficiently far advanced to give confidence that those dates can be met. An emerging date announcement process can also be used to alert the viewing public to the date and time on which their viewing habits may be impacted. In addition, the management of technical and communications plans in parallel can greatly facilitate the accurate and timely communication of technical changes and can even be used to drive spectrum planners and engineers to minimize viewer impacts in their planning.

6. Predetermined engineering principles foster clear collaboration, save costs and expedite repack implementation.

A principles-based approach can be used to attain industry clarity and consensus on key technical matters, making clear options available to broadcasters and providing transparency to the decision-making processes when the repack is under way. It is critical that broadcasters are involved in and engaged with the design of the governing principles. Such an approach can greatly ease the management of the TV Broadcaster Relocation Fund and expedite the repack implementation because the volume of technical principles open to debate is contained and broadcasters can work to a set of network re-planning principles and tools to gain confidence that the costs associated with their approach will be reimbursed. For example, principles might cover how spectrum is allocated to broadcasters in markets, the criteria for replacing and/or modifying antennas, processes for exchanging spectrum between stations, engineering techniques (that are reimbursable) for regaining coverage lost as a result of the repack.

7. A bespoke point of authority online resource for managing the repack engineering program is critical to ease the design, planning and implementation of a high-scale and extremely challenging project.

To centrally manage an engineering repack program of this scale across multiple broadcasters requires the smart use of technology to facilitate a transparent and shared understanding of what is going on. A secure online resource (with the required access and user controls) can be used to manage, for example, the status of spectrum allocations and use, iterations of band-plans and repack roll-out plans, engineering workflow and interdependencies between broadcasters, cost reimbursement applications and sign-offs. Critically, as a point of authority program resource multiple stakeholders can remain across the project as they require to different degrees of detail, dramatically decreasing the project management drain and cost across all stakeholders.

8. Clear Principles for Cost reimbursement are critical to the success of the repack.

Setting clear principles for cost reimbursement in advance of the start of the project is critical since otherwise broadcasters are unlikely to commit to the plan. Ideally, these should be based on best practice engineering and project management principles with each broadcaster being awarded a budget for its part in the program and robust reconciliation and accountability to ensure proper control of expenditure of public funds.

9. A repack program that facilitates industry innovation and minimizes ongoing viewer impacts would create opportunities to promote a strong future for broadcast TV.

The repack program presents an opportunity for broadcasters to consider the adoption of innovations in the way that they use spectrum. Such innovations can promote spectrum efficiency

while at the same time creating opportunities for broadcasters to launch new services thereby underpinning the future of the terrestrial television platform.

Appendix: More information about Transmit Consultancy

Transmit consultants delivered the end to end broadcast re-engineering program for two spectrum repacks in the UK to industry and political acclaim, under budget and on-time: leading unprecedented industry collaboration. In addition, our consultants have experience of broadcast TV networks and repacking projects in Australia, Serbia and Ireland. Transmit is currently consulting broadcasters on the 3rd European repack resulting from the pending clearance (from Broadcasting) of the 700MHz band, due to be confirmed at the World Radio Conference in 2015.

Our consultants have launched and operated broadcaster shared multiplexes; set-up and managed the technical operations of both TV stations and broadcast TV platforms. Together we are experts in one of the most complex broadcast TV networks in the world.

Transmit's unique expertise and experience of leading and managing significant and complex repacking projects at an industry level means that Transmit can offer unrivalled consultancy and services to help plan, co-ordinate and implement a spectrum repacking program.

Jules Howard-Wright, Principal Consultant & Co-Founder

From 2006 to 2012 Jules was Broadcast Project Director at Digital UK for the Digital TV Switchover and 800MHz repacking programs. As Broadcast Project Director, she managed the technical planning, co-ordination and stakeholder management for the re-engineering of the entire UK television transmission network. During 2011 and 2012, Jules also led the technical operations and development of the UK's terrestrial platform Freeview on behalf of multiplex operators.

Jules has worked in broadcasting at an industry level for close to 15 years and has delivered technical projects (TV, internet and mobile) her whole career. Her career started at a digital communications agency (now Digitas LBi), after which Jules spent a year with a New York dot.com. As a Commercial Manager at a broadcast production house, she managed licenses delivering satellite and cable projects in the UK, USA, Israel and Australia. In 2004, Jules started her first consultancy; her first client was BSkyB where she led the team responsible for launching all broadcasters' interactive services on the Sky platform.

In 2012 – for her work on UK repacking - Jules was a Women of the Year Finalist in the Cisco everywoman in Technology Awards.

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Mike Hughes, Principal Consultant & Co-Founder

From 2005 to 2012 he was Broadcast Director at Digital UK for the Digital TV Switchover and 800MHz repacking programs. As Broadcast Director, he led the technical planning, co-ordination and stakeholder management for the re-engineering of the entire UK television transmission network. From 1997 to May 2013, Mike managed Digital 3and4, a multiplex license holder and a joint venture between ITV and Channel 4.

He played a key role in the launch of UK's terrestrial platform Freeview (and its predecessor OnDigital), for many years he chaired the Board responsible for the technical strategy and operations of this platform. He started his career in industry relations working for the Independent Television Companies Association in the UK and then the Australian Broadcasting Commission in Sydney. He returned to the UK to Anglia Television (part of ITV) rising to Deputy CEO. In 1995, Mike formed his first broadcast consultancy; his first major client was Channel 5 where he acted as Project Co-ordination Director for launch. He is currently a Non-Executive Director for Mustard TV, the local TV license holder in the UK.

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Our team of consultants

All of our consultants have played a key role in designing and delivering spectrum repack programs, launching and managing DTT networks and multiplexes. Our team consists of experts who are experienced through the end-to-end broadcast chain. Together, we have: delivered projects in the UK, Australia, the USA, Serbia, Cyprus and Ireland; chaired many Boards and industry committees, sat on Boards and committees; advised Government and regulators on behalf of broadcasters; led industry wide teams; played a role in international spectrum negotiations; managed distribution and technical operations for broadcasters; and ran multiplexes.